# Report from the Deepwater Subcommittee of the MMS OCS Scientific Committee

#### Gulf of Mexico ITM

## January 9-11, 2007, New Orleans, Louisiana

Joe Smith, Chair, Deepwater Sub-committee, Will Schroeder, Mike Rex, and Robert Diaz

January 16, 2007

MMS OCS Scientific Committee Deepwater Subcommittee (DW/SC) members Joe Smith, Will Schroeder, and Mike Rex met at the Gulf of Mexico ITM to discuss possible deepwater-related items for possible consideration at the upcoming general meeting of the OCS Scientific Committee meeting. OCS Scientific Committee chair Bob Diaz also participated in this discussion. The following discussion summary lists some issues that we may want to consider more fully at our next general committee meeting.

### Research on Deepwater Corals

The ITM meeting agenda includes several presentations related to the distribution and biology of deepwater corals, in particular Lophelia pertusa. It appears that MMS is considering planning the next round of biological studies of these organisms. After discussing the results presented at the meeting, the DW/SC recommends that a period of evaluation and synthesis would be appropriate before plunging ahead with the next round of deepwater biological studies. The DW/SC recognizes that the MMS has parallel interests in this area: exploratory studies aimed at defining the range habitats of deepwater corals, and studies aimed at defining the factors that control the development, growth, and environmental sensitivities of these organisms. Effective planning and execution of studies in the latter area will require full consideration of the final results of the current research project. Although exploratory studies can continue, the learnings from studies done to date need to be digested before properly designed further studies can be effectively scoped and contracted.

# Effects of Deepwater Oil and Gas Exploration and Development on the Continental Slope

MMS recently completed a multi-year program of study of the environmental effects of oil and gas exploration and development at continental slop sites with water depths near 1000-1100 m depth range. During the ITM meeting discussions, the question arose as to whether an additional similar study was needed for sites representing the current depth ranges of current deepwater activity, e.g. 2500 m . This issue was discussed during the subcommittee meeting. The results reported for sites in the 1000-1100 meter depth range seem qualitatively similar to those that have been observed in other studies at shallower (300–600 m) depths, particularly when allowing for some increase in the areal footprint of discharged materials resulting from the greater depth available for dispersion.

Considering that the deepwater fate and effects study of drilling discharges showed that the effects are in general similar to those observed at moderate depths, it is not clear that there is a strong need to extend the fate and effects work to the 2500 m depth range. The DW/SC does not see a clear need for repeating this study at a greater depth unless there was some evidence to indicate that qualitatively different phenomena influencing the impact of industry activities were taking place in a greater depth range.

# Vessel Resources and Collaboration Initiatives for Deepwater Research

New research required as drilling activities expand into deeper areas of the Gulf of Mexico is taxing the available vessels support resources. The Scientific Committee may wish to recommend that MMS work towards interacting with other agencies to shift more blue water ship and submersible support to the Gulf of Mexico.

Research collaborations with Mexican institutes and scientists will be very important for making the best use of what we learn from studies of the southern extent of the U.S. deepwater Gulf of Mexico. To follow up on its recommendation from two years ago, the Scientific Committee should ask for an update from MMS on efforts to work out agreements for collaborative programs in advance of U.S. research efforts.

J.P. Smith DW/SC Chair

# MMS Gulf of Mexico OCS Region (GOMR) Response to: Report from the Deepwater Subcommittee of the OCS Scientific Committee (OCS SC) Gulf of Mexico ITM January 9-11, 2007, New Orleans, Louisiana

**Response: Research on Deepwater Corals** 

MMS GOMR staff and the Subcommittee have been involved in ongoing discussions over the past few years resulting in an evolving consensus that a period of evaluation and synthesis are needed. As part of this re-evaluation, MMS has modified, delayed, and combined aspects of several previously proposed studies to achieve the recommended goal. Our efforts, and line or reasoning, will be presented to the OCS SC at the upcoming meeting in New Orleans.

# Response: Effects of Deepwater Oil and Gas Exploration and Development on the Continental Slope

The MMS GOMR concurs with the Subcommittee's assessment that there is no need for a study to examine the effects at 2500m depth at this time.

Response: Vessel Resources and Collaboration Initiatives for Deepwater Research

The MMS GOMR has been working on involving as many Federal Agencies as possible in joint, collaborative work. Evidence of our success is our collaboration through the National Oceanographic Partnership Program (NOPP) on various research studies: deepwater archeology and reef effects; marine mammals; and hydrates and chemosynthetic communities. These collaborations have resulted in the MMS Projects winning three prestigious Cooperative Conservation awards from the Department of Interior and the 2007 NOPP Interagency Excellence in Partnering Award. Further, the GOMR has made very substantial progress in developing collaborations with the Mexican government and with PEMEX. These new initiatives will be reported in detail to the Committee at their upcoming New Orleans meeting.